

General comments

The overall performance of the learners is low compared to the previous year. Most of the learners could not interpret the questions which made it difficult for them to score more marks.

The question paper covered the whole syllabus thoroughly with clear instruction and in simple English.

Individual questions were well structured with clear and concise instructions.

The application of knowledge is lacking in most learners, e.g. they cannot differentiate between research questions and hypothesis.

It was observed that learners were failing to write their answers in point format, instead they paraphrased their answers which made it difficult for the markers to allocate marks to such learners.

In general, some learners had problems with defining concepts such as statistics and secondary data, organising and financing the chosen project on how to improve water supplies and sanitation that can enhance the health of the people.

SECTION A

1 (a) (i) Well answered.

Answer:

Omuthiya

[1]

(ii) Well answered.

Answer:

To find out how far the government had gone towards its mandate of providing water and sanitation in the rural areas

[1]

(iii) Poorly answered.

Learners could not explain why clean and improved sanitation can help to prevent the spread of diarrhoea.

Answer:

- Clean water does not contain bacteria or germs/not contaminated
- Improved sanitation reduces the spread of germs by flies/prevents germs to enter places where children play

[2]

(b) (i) Fairly answered.

Only some of the learners could define statistic, some referred to collection of information instead of numerical data.

Answer:

Statistic is science of collecting and analysing numerical data/information collected and expressed in the form of numbers

[1]

(ii) Fairly answered.

Learners could not extract why statisticians were important in the survey

Answer:

They were involved in capturing, storing and analysing the data.

[1]

(c) (i) Fairly answered.

Majority of the learners could correctly define primary sources but failed to define secondary sources instead they just gave examples of secondary sources.

Answer:

Primary source – information collected by yourself/first hand/original

Secondary source – information that is already existing/information collected by someone.

[2]

(ii) Well answered.

Answer:

Difficulties of interviews

- People might not be willing to answer/uncooperative
- Make irrelevant/distorted remarks/do not tell the truth
- People can be suspicious
- People might be offended by nature of some questions
- People were not be at home when interviewer called
- It could be time consuming/take a lot of time
- Cultural beliefs make interviews difficult

[4]

- (iii) Fairly answered.
Learners failed to differentiate between preparing and carrying out an interview. Most of the learners wrote all the answers from one of the two.

Answer:

Preparing interview

- Arrange interviews ahead of time/ask permission
- Prepare questions carefully
- Dress neatly
- Arrange transport
- Arrange all materials/equipment
- Take along an interpreter

Carrying out

- Be polite/friendly/thankful
- Take notes/recording
- Identify purpose of interview
- Arrive on time
- Listen carefully

[4]

(2 marks for preparation; 2 marks for carrying out)

- (iv) Well answered.

Answer:

Examples of secondary sources

- Textbooks
- Newspapers/magazines
- Statistics from Ministries/NGOs
- Radio
- Television documentaries/Videos
- Photographs/pictures/posters
- Maps

(Any 4)

[4]

- (d) Fairly answered.

Only few learners were able to tell what to do with the information collected about sanitation and water services.

Answer:

What to do with information collected

- Write/type a report
- Save information on computer
- Hold a meeting to give feedback
- Compare results with previous researcher's results
- Take information to agencies/NGO/relevant ministries
- Make recommendations/solutions how to solve problems
- Give information to radios/TV/internet
- Publish results in newspapers/magazines
- Analyse information
- Draw conclusions
- Draw graphs/statistical information
- Literature review-quoting previous reviews

(Any 5)

[5]

[25]

- 2 (a) (i) Poorly answered.
Most of the learners could not come up with a small scale project related to the improvement of water supply and sanitation.

Answer:

Small scaled project

Water – People dig wells/boreholes through water bearing rocks/hand pumps/pipe lines could be installed/water supplies are protected

Sanitation – dig pit latrines – to prevent spreading of diseases/disposal of stools

[4]

- (b) Poorly answered.
Learners could not describe problems with solutions on organising and finance. Instead they just suggested problems without solutions or solutions without problems.

Answer:

Problems and solving

Organisation:

Problem – no co-operation between community members

Solution – educate them about positive consequences/outputs

Problem – lack of skilled labour

Solution – apply for experts to train community

Finance:

Problem – lack of equipment

Solution – group donates equipment

Problem – no enough money to finish project

Solution – apply for low interest loans/grants

(1 problem = solution)

[6]

[10]

SECTION B

- 3 (a) (i) Fairly answered.
Most of the learners were able to identify a research topic, research question or hypothesis but failed to identify the research area.
- Answer:**
Full statement of topic and area and description of hypothesis or research question [2]
- (ii) Fairly answered.
Most of the learners were able to come up with the aim but they failed to relate it to the research question or hypothesis.
- Answer:**
Simple brief/short statement of your aim. [1]
- (iii) Fairly answered
Most of the learners wrote data collection methods and sampling methods instead of data presentation method and why such presentation was used.
- Answer:**
Types of presentation methods and explanation
- | | |
|-------------|-------------------------------------------------------|
| Bar graph | - easy to read/understand |
| | - easy to compare information |
| | - show clear information |
| Pie chart | - show clear information |
| | - easy to compare sections |
| Table | - easy to read and understand |
| | - easy to compare information |
| Map | - show clear information |
| | - different geographical areas can easily be compared |
| | - show information by areas/regions |
| Tally chart | - show clear information |
| | - show clear frequencies |
- (Any 1) [2]
- (iv) Fairly answered
Learners still failed to master the command word describe instead they listed the findings. They could not come up with evidences and implications in their answers. The majority of the learners could not understand the word implication and apply it in research.
- Answer:**
Level marking
- Level 1** (1 – 2 marks)
Simple statement – some findings drawn, but poorly related to aims/not well supported by evidence
- Level 2** (3 – 4 marks)
Finding based on evidence and well related to aims, though not fully developed
- Level 3** (5 – 6 marks)
Full and valid findings, supported by evidence. Must show reference to implications. [6]
- (b) Fairly answered.
The majority of the learners failed to describe the disadvantages of carrying out research in your local area, instead they described the difficulties of the interview
- Answer:**
Maximum 2 advantages and 2 disadvantages
- people trust you to give information
 - easy to access resources
 - will feel safe, you know the area and people
 - better communication, you can speak the local language
 - cheaper transport costs, you do not have to travel far from your own place.
- Disadvantages**
- shortage of libraries, internet, etc
 - People are shy/uncomfortable/suspicious to talk to you because you are known to them
 - You can be biased/prejudiced [4]

[15]

Positive suggestion to the teachers

- Teachers should prepare learners for the year end examination throughout the year starting with tests and projects using previous papers.
- Teach the learners to read instructions and questions carefully before they attempt them.
- Teachers must guide the learners on how to label questions, spacing and interpretation of questions.
- Learners should be motivated to carry out their own research and avoid all learners doing one topic.
- Practice with the learners and ensure that they grasp research skills.
- Learners must be guided to use development concepts and stick to developmental topics. Teachers must coach and carry out the full practical research with all the learners. Avoid teaching broad topic/vague/general or one topic with the learners to ensure broad range of developmental topics.
- Brainstorm topics with the learners.
- Make a clear distinction between research questions and hypothesis.
- Focus on teaching the learners how to formulate research questions in which they emphasise/address the causes, effects and solutions to the problem.
- Drill the learners on the use of interrogative pronouns e.g. why, how, when and what, when formulating research questions.
- Teach the learners not to use words like is, do, are which can result into closed ended questions.
- Train the learners on how to formulate research aims emphasising on the use of terms like: to investigate, find out and avoid formulating aims in question form.
- Teach the learners different ways of data presentation methods.
- Teach the learners how to write down findings with evidences and implications.
- Teach the learners how to draw conclusions and make some recommendations on the findings.

The following topics must be avoided at all cost:

- Pollution
- HIV/AIDS
- CBD accidents
- Unemployment
- Education
- Poverty
- Traffic count
- Peer pressure
- Global warming
- Urbanisation
- Migration